

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
)	
NUCLEAR ENERGY INSTITUTE)	
)	
and)	WT Docket No. 09-176
)	
UTILITIES TELECOM COUNCIL)	
)	
Petition for Waiver to Permit Commercial)	
Nuclear Power Plants to Obtain Licenses)	
Under Part 90 for Part 74 Headset)	
Equipment for Indoor Communications)	

COMMENTS OF DOMINION RESOURCES SERVICES, INC.

Dominion Resources Services, Inc. ("Dominion"), by its counsel and pursuant to the Commission's Public Notice, DA 09-2171, released October 5, 2009, hereby respectfully submits comments in support of the above-captioned Petition for Waiver ("Petition") filed by the Nuclear Energy Institute ("NEI") and the Utilities Telecom Council ("UTC"). The petition seeks a waiver of the Commission's rules to permit commercial nuclear plants to obtain a license under Part 90 of the Commission's rules for the operation inside nuclear plants of certain intercom and headset equipment that has been certified for use by broadcast auxiliary stations under Part 74 of the Commission's rules. The intercom and headset equipment is manufactured by Telex Communications, Inc. ("Telex").

Dominion is a member of UTC and NEI and uses the Telex devices at issue in this proceeding for communications within its four nuclear stations, North Anna (Mineral, Virginia), Surry (Surry, Virginia), Millstone (Waterford, Connecticut), and Kewaunee (Carlton, Wisconsin), especially during refueling operations, or "outages" as they are known in the industry. At the present time, Dominion operates its Telex headsets pursuant to an Experimental license,

WE2XGT, which expires on February 18, 2010. Accordingly, Dominion supports the grant of a waiver that would permit the regular licensing and continuing operation of the Telex equipment after the expiration of its Experimental license.

I. Introduction

Dominion affiliates serve millions of electric customers across the East and parts of the Midwest. Dominion generates electricity in Virginia, North Carolina, Connecticut, Massachusetts, Rhode Island, West Virginia, Indiana, Pennsylvania, Illinois, Wisconsin and Ohio from numerous facilities, including fossil fuel stations, hydroelectric stations, combustion turbine sites, and nuclear power stations.

II. Dominion's Use of Telex Equipment

Telex equipment has unique characteristics that support communication during critical tasks, especially nuclear plant refueling outages. Dominion utilizes Telex wireless headset equipment for every refueling outage at its four nuclear power stations. The Telex equipment consistently provides superior coverage and audio quality.

Each nuclear power station is equipped with Telex equipment for critical operations throughout the duration of the refueling outage. Because multiple base stations can be connected via audio matrix to extend coverage to the control room, the fuel building and the turbine floor, operations personnel in containment, the control room, and fuel building can use the equipment simultaneously during spent fuel off-load and fuel loading as well as other maintenance activities during an outage. Having dependable, reliable, and clear communications is essential to bringing a unit back on line efficiently and safely and the Telex equipment provides consistent, clear audio and full coverage of all floor levels in containment.

III. Telex Equipment Has Unique Features that Make it Better for Use in Nuclear Plants than any other Available Communications Equipment

The Telex equipment has distinct advantages over other commercially available radios. The equipment provides full duplex, hands-free operation, so that users of the equipment may complete critical tasks without the need to grasp a walkie-talkie type radio. Telex equipment also is far smaller than other equipment and does not obstruct the user. The equipment functions without any need to push-to-talk, freeing the user to complete the tasks at hand by permitting uninterrupted voice transmission.

Telex equipment also is far superior to other types of radios in its ability to reject background noise and multipath interference and to provide high quality audio. This ability allows users to communicate clearly in an environment of high background noise.

Unlike available Part 90 equipment, such as belt-style UHF communications systems, Telex equipment avoids inadvertent actuation of other power station equipment. Telex equipment also is far easier to configure and operate than these other systems. In fact, Dominion once abandoned a different system during a refueling outage in favor of the Telex system because of the initial system's lack of functionality, limited range, and interference problems.

Because of these advantages, Telex equipment is used by Dominion for operation and maintenance tasks within the interior of its nuclear power stations. For example, Telex equipment is used in high radiation areas during refueling procedures, where the equipment allows constant communication between the control room, the fuel building, and the containment refueling machine. The equipment is used for communications between Dominion's Health Physics team and workers who enter areas such as the reactor cavity, the reactor head and the fuel transfer canal to conduct maintenance and refueling activities. Telex equipment is used for communications between overhead crane operators and load directors during lifting operations.

Use of Telex equipment minimizes the potential for voice drops or interference. Unlike other equipment, Telex equipment permits reliable, interference-free, hands-free, uninterrupted transmissions for Dominion personnel engaged in various tasks. This helps Dominion employees comply with federal guidelines (*e.g.*, permitted time of exposure) regarding fuel movement and other tasks, by permitting them to remain in constant communication while freeing their hands to the tasks required. By using Telex base stations with frequency agility, communications can be performed simultaneously and independently by the containment refuel team, the containment coordination team, and the Health Physics monitoring team, which monitors multiple locations within containment.

IV. There Have Been No Interference Complaints

As required under the terms of its Experimental license, for each of the refueling outages at Dominion since 2006, the Society of Broadcast Engineers was notified before the use of the Telex equipment. No complaints or inquiries about interference to licensed facilities were ever received.

V. Dominion Has Been Unsuccessful in Efforts to Identify a Suitable Alternative to Replace the Telex Equipment

Dominion has performed extensive testing of alternative wireless solutions in containment at all four of its nuclear stations during a refueling outage. It was found that no other solution provided the level of safety and functionality that the Telex wireless headset equipment provided. The deficiencies of other wireless solutions included:

1. Limited number of users per base unit;
2. Use of frequencies that were used for other plant systems;
3. Could not work satisfactorily with the audio matrix to extend coverage to other locations in the station;

4. Very limited in coverage on the containment floors;
5. Did not perform to the standard of the Telex equipment;
6. Caused frustration and was a distraction for the personnel working the outage.

VI. The Unique Requirements of Nuclear Power Stations Make A Waiver in the Public Interest.

The operation of nuclear power stations presents unique challenges not confronted by most other spectrum users. These challenges include the need for station workers to operate quickly and in compliance with strict federal guidelines relating to radiation exposure.

No reasonable alternative exists to the Telex equipment. Nuclear station operators like Dominion should not be required to abandon the Telex equipment which performs superbly under the difficult conditions posed by nuclear power stations and replace it with an inferior alternative. Given the circumstances under which a waiver would be available, particularly use of the Telex equipment only within the interior confines of the station, the chances of interference to licensed Part 74 broadcast auxiliary users is so remote as to be nonexistent. The public interest will best be served by continued authorized use of Telex equipment.

Accordingly, Dominion submits that the requested waiver to permit the regular licensing and continued use of Telex equipment inside nuclear power stations should be granted.

CONCLUSION

For the reasons set forth herein, Dominion asks the Commission to grant the Petition and to permit nuclear power station operators to continue to rely upon the technology that best fits their needs.

Respectfully submitted,



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Dated: October 26, 2009